



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/718,756	11/20/2003	Warren Thomas Johnson	2003P87080US	1448
28524	7590	08/02/2006	EXAMINER	
SIEMENS CORPORATION INTELLECTUAL PROPERTY DEPARTMENT 170 WOOD AVENUE SOUTH ISELIN, NJ 08830			MENON, KRISHNAN S	
			ART UNIT	PAPER NUMBER
			1723	

DATE MAILED: 08/02/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

8

<b>Office Action Summary</b>	<b>Application No.</b> 10/718,756	<b>Applicant(s)</b> JOHNSON ET AL.	
	<b>Examiner</b> Krishnan S. Menon	<b>Art Unit</b> 1723	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 24 July 2006.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-4,7 and 34-46 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-4,7 and 34-46 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### DETAILED ACTION

Claims 1-4, 7 and 34-46 are pending in the RCE of 7/24/06

#### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

1. Claims 1-4,7 and 34-46 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kopf (US 6,017,451) in view of Janik (US 6,048,454).

Claim 1: Kopf teaches a membrane filtration system (see figure 1,2) comprising a housing (260) with four connecting collars (200), filter submodules (84) having hollow fiber bundles (column 7 lines 19-28), and a clip (or clamp) for releasably securing the submodules to the collars as claimed (see column 5 lines 18-28: conventional clamps). The instant claims differ from the teaching of the reference in the details of the clip. However, the conventional "C" clamp meets the limitations recited for the clip, and one of ordinary skill in the art would use a conventional C clamp for securing the submodules to the collar as taught by the reference for quick and easy assembly and disassembly. Such a conventional clamp is taught by the reference Janik – see figure 9, it has a circumferential split, flanges that engage with the flanges of the collar, the longitudinal projection (looks like a T, whose length can be adjusted with a screw), and is a snap-fit.

Art Unit: 1723

Claim 2: housing 260 is in fluid communication with the collar

Claim 3: collar has internal stepped seat – see the O ring groove in figure 2

Claim 4: radially outwardly directed circumferential flanges – see figure 2

Claim 7: corresponding radially inwardly directed flange with step to engage with the collar – the submodule has similar mating flange.

Claim 34: four submodules – see figure 2

Claim 35: collars in common plane. Re parallel axis, the figure 2 has perpendicular axis for the collars, but they could as well be parallel axis by having the collars arranged at the end of the elbows at location 230, for instance. See this with respect to the assembly in figure 1. A mere ... rearrangement of parts (In re Japikse, 181 F.2d 1019, 86 USPQ 70 (CCPA 1950) and In re Kuhle, 526 F.2d 553, 188 USPQ 7 (CCPA 1975) is unpatentable.

Claim 36 has limitations of claim 1 with plurality of submodules – see figures.

Claim 37: clip connection by snap – fit: see rejection of claim 1.

Claim 38: second connecting sleeves at opposite end of the hollow fiber submodule – see figure 1.

Claim 39: second housing, etc – see figure 1

Claim 40, 41, 42: filtrate and cleaning conduits fluidly connected: conduits can be seen fluidly connected to the housing in figure 1, which could be used for filtrate and cleaning solutions (90, 92, 102, etc). Filtrate and cleaning connections are functional language or intended use, and are not patentable limitations. Re positioning cleaning solution conduit between two pairs of second collars, see figure 1, line 102. This

Art Unit: 1723

conduit is between two “second” collars – collars at the bottom. “Cleaning solution” is functional language, and one could use the conduit 102 for pumping in cleaning solution.

Claim 43: Modules are upright – see figure 1

Claim 44: first collar to the first housing – see figure 1

Claim 45: open feed tank: the references do not teach any open feed tank.

However, such use of feed tanks is commonly known, and it would be obvious to one of ordinary skill in the art at the time of invention that a feed tank may be necessary to supply the fluid to be processed in the filter system as shown in figure 1 of Kopf.

Claim 46: fluid tight cap – see top 62 are the corresponding bottom part in figure 1.

### ***Response to Arguments***

Applicant's arguments filed 7/24/06 have been fully considered but they are not persuasive.

In response to the argument that Kopff is completely silent on the connecting collar and sleeve: a sleeve is only a tubular part; a collar is a ring or a round flange to restrain motion (Webster's Dictionary). Kopff meets both these requirements. The reference does not teach a clip; however, what the applicant recites in the claim would read on a “C” clamp, which is taught by the secondary reference, Jenkins. Arguments regarding the Jenkins reference is not commensurate with the rejection.

Art Unit: 1723

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Krishnan S. Menon whose telephone number is 571-272-1143. The examiner can normally be reached on 8:00-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wanda L. Walker can be reached on 571-272-1151. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Handwritten signature of Krishnan S Menon and the date 7/31/06.

Krishnan S Menon  
Examiner  
Art Unit 1723